THE INFLUENCE OF PARENTS' KNOWLEDGE, ATTITUDES AND BEHAVIOUR ON THEIR CHILDREN'S ORAL HYGIENE

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ABSTRACT

Different health behaviour models are discussed and it is concluded that they are insufficient to explain the reasons for changes in oral hygiene in small children, a topic that is only sparsely dealt with in Hong Kong. A new model is proposed and tested on a group of children aged two to four years ($n=18$). Another group ($n=21$) served as control. Visible plaque index of both groups were registered before and after the project. The parents of the test group were given information and instruction in oral hygiene. Besides, the test group's knowledge on and feeling towards oral hygiene was tested by a questionnaire before and after the project. The same questionnaire was given to the parents of the control group. The results showed a decrease in visible plaque index in the test group ($p<0.05$) and no change in the control group. There was no improvement in knowledge on and feelings towards oral hygiene in the test group which showed the same level as the control group. Conclusion: You may change the parents' oral hygiene behaviour towards their children without changing their knowledge on dental health and disease. The reason is two different psychological phenomenons: The Hawthorne effect and the very tight fixations between parent and child.

INTRODUCTION

Your childhood should be carefree and happy

This sentence - taken from an advertisement - appeals to all parents and maybe especially mothers. Such a fairy-tale childhood is mainly depending on the parents. They are responsible for the child's upbringing and surroundings.

We know from *Piaget*[1] that children at pre-school age do not understand causal relation, that they learn by imitation and that they accept a lot of procedures involving and influencing their own world without asking or even thinking about why they are necessary. We know from *Ericson*[2] that the reason why children of the above-mentioned age accept to be forced to change behaviour without knowing why they have to, is their dependence on their parents. They need their love and protection to survive and are therefore willing to do nearly anything to get this. So, nearly whatever the parents demand from the child concerning change in passive or active behaviour, the child will accept it as long as the result is fulfilling of love and acceptance needs[3].

To change oral hygiene habits in pre-school children thus turns out to be a "two stage" rocket. The children are the target group but the parents are the "key" persons. You have to reach the children <u>through</u> their parents and cannot do it directly as they have no "free will" partly because of their developmental stage and partly because of their dependence on others.

This is confirmed by several authors. To mention: *Rayner*[4] felt that the mother's dental practices are one of the most influential factors in determining her children's practices. *Bullen et al*[5] concluded in their article that children's dental health practices are influenced mostly by parental direction and guidance as well as the parents' own dental health practices.

A commonly used health behaviour model is shown in Fig. 1[6].

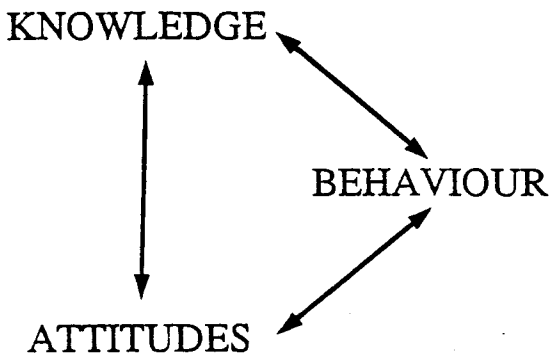

Fig. 1: This health behaviour model says that all three elements of personality interacts and may influence each other.

It shows that all three elements, necessary for changing oral health behaviour, interact and that the change is not just a linear process, like: KNOWLEDGE ----> ATTITUDES ----> BEHAVIOUR, where increased knowledge leads to change in attitudes and this in turn to a change in behaviour. This acceptance of the complexity of the interaction between the three elements is what we intended to use in our project. But unfortunately the model shown in Fig. 1 tends to be a tautology (is always true) and thus of no explanatory value. So we concentrated on "ATTITUDES" and used this element as the prime mover in our attempts to improve the oral hygiene in pre-school children.

The assumption behind this decision is that children have the "health" behaviour model shown in Fig. 2.

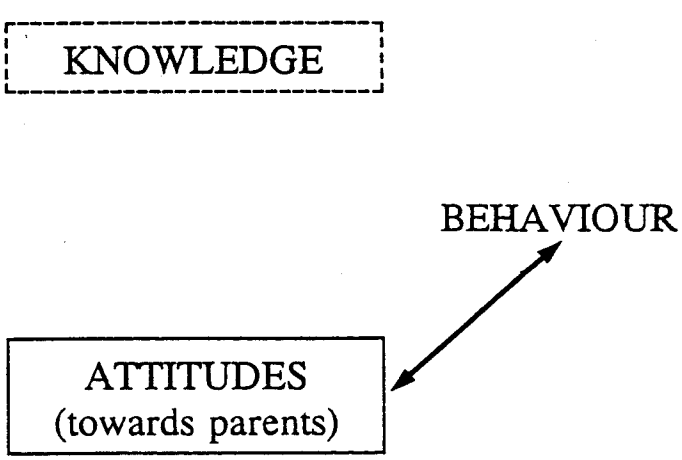

Fig. 2: An adapted health behaviour model for children aged two to four. Knowledge has no influence on behaviour or attitudes. Only attitudes towards the parents influence behaviour.

It means that the child's behaviour is completely dependent on the attitudes - not towards oral hygiene - but towards the parent's reactions (praise, love) and therefore the behaviour will tend to be in a way that secures positive attitudes. So, concerning the child, the attitude towards and of course the knowledge on oral hygiene is not important at all. The important thing is to secure that the parents are interested in and have positive attitudes towards good oral hygiene. In that case the parents will praise the child if it accepts eg. toothbrushing and the child will get reward which strengthen the attitudes towards and acceptance of the behaviour demanded.

For the parents, the "health" behaviour model could look like Fig. 3.

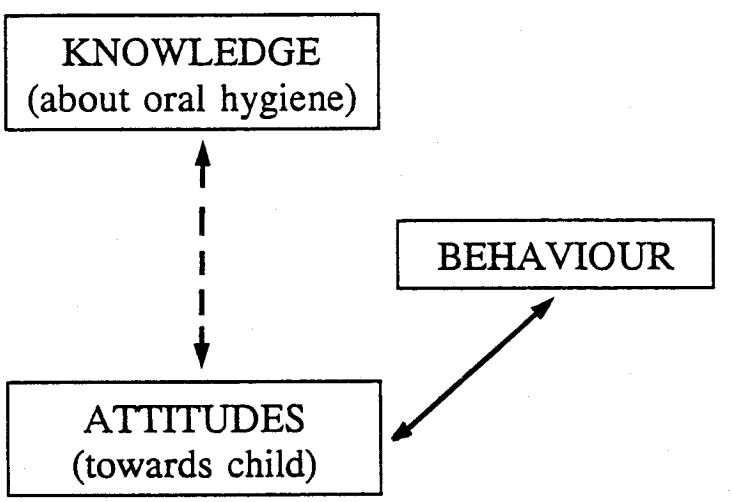

Fig. 3: An adapted health behaviour model for parents to children aged two to four years. Knowledge only have a restricted influence on attitudes and behaviour. It is mainly the attitudes towards the child that create a change in behaviour.

The parents' attitudes towards their child are strong and positive. That means they are inclined to learn about anything that may create more pleasant and shelter life for their child. The result is a change in their behaviour which the child fully accept because the parents show positive feelings toward their child.

In summary, it is <u>not</u> the benefit from good oral hygiene that is the prime mover, but the attitudes (feelings) between parents and child. Oral hygiene is, so to speak, just

something you put into these attitudes to strengthen the parents' feeling of taking care of the child.

In Hong Kong, there still is a lack of activity from Government to conduct oral hygiene skills and knowledge to the parents of preschool children[7]. Neither is there any information on the oral hygiene status among pre-school children.

So, in our project, we decided to evaluate the parents' behaviour concerning oral health of their children and see if it would change after oral health education.

Thus the aims of this project were:

(1) to investigate the knowledge on dental health and oral hygiene of the parents to children aged two to four.

(2) to investigate the oral health of a group of children before and after the education and instruction of the parents.

On the basis of these aims the following hypothesis were forwarded:

After conducting education and instruction to parents,

(1) they will show an increase in knowledge on dental health and dental health behaviour;

(2) their children will show a decrease in plaque index.

MATERIAL AND METHODS

A. Project Planning

I. Study population

In agreement with the supervisor of Yan Chai Hospital Ju Ching Chu Child Care Centre (*Miss Cheung Yuk King*) 50 children were selected by random. Because of an unfortunate choice of one of the examination days (the afternoon before a holiday), where nobody showed up, the study population was reduced to 39. The age of the study population ranged from two to four years. The age of the parents ranged from 23 to 57 years ($\bar{x}$ = 34.5).

The children were divided into two groups, 'test' and 'control' group, consisting of 18 and 21 children, respectively.

II. Outline of the project

The project was carried out in the following stages:

Stage 1 *Calibration of examiners*

- Calibration of the examiners was conducted at the Department of Children's Dentistry and Orthodontics (Dental Faculty, The University of Hong Kong)

Stage 2 *Pilot study*

- A pilot study was conducted to get an impression of the oral hygiene condition of our target group

Stage 3 *Pre-examination of both groups*

- Visible plaque index registration of both groups
- Questionnaire to the parents of test group only
- Oral health information and instruction delivered to the parents of the test group
- Pamphlet distributed to the test group

Stage 4 *Post-examination of both groups*

- Visible Plaque Index registration of both groups
- Questionnaire to the parents of both groups

Stage 5 *Evaluation of the results*

III. Timing of the project

The protocol of the project is given in Table 1 describing the activities and the duration of the project.

Table 1. Time-table for the project

Date	Duration	Content
21.12.92	1 day	Calibration of two dental students in Department of Children's Dentistry and Orthodontics (The University of Hong Kong).
7.1.93	1 morning	Pilot study: Measuring the plaque index in 20 children.
3.4.93	1 morning	Pre-examination of both group.
	1 afternoon	Questionnaire answered by parents of the test group.
		Oral health education (one talk, and two seminars) conducted by dental students.
		Pamphlets distributed.
15.5.93	1 afternoon	Post-examination of both groups.
		Questionnaire answered by parents of both groups.
1.6.93	Several weeks	Collection of results.
		Statistical analysis.
		Writing the report.

B. Details of the Project

Stage 1 - *Calibration*

Before the actual oral examination calibration was practised in the Department of Children's Dentistry and Orthodontics, Faculty of Dentistry, under supervision of *Dr. O'Donnell.* Ten children aged 7-10 were chosen for the calibration. A standardized charting form was used (Appendix 1).

Stage 2 - *Pilot Study*

The oral examination was carried out by two examiners and the results were recorded by dental students on a standard charting form (Appendix 1). Twenty

children aged two to four years were involved. On examination, the child was supported by one of us and examined by using hand torch (portable) and mouth mirror.

Indices used

The oral hygiene status of the children were assessed by the Visible Plaque Index (VPI)[8].

Stage 3

a. *Pre-examination of both groups*

Thirty-nine pupils were involved. The examination was done under the same conditions, using the same criteria and index as in the pilot study.

The examination was conducted by two examiners and for the first five subjects the results were compared to calculate the consistency index (CI).

b. *Questionnaire*

The questionnaire was completed by the parents of the test group before the oral health education (Appendix 2).

i) **Format.** The questionnaire consisted of 17 multiple choice questions. There could be more than one right answer to some of the questions.

ii) **Content.** The questions could be divided into three groups:
- knowledge: dental knowledge especially concerning their child.
- behaviour: oral care habits of themselves and their child.
- family background information.

c. *Talk*

Parents belonging to the test group participated in a talk that durated 20 minutes and was delivered by a dental student. Some clinical photos borrowed from the Department of Periodontology and Public Health (Faculty of Dentistry, Hong Kong) was used as illustrations.

The content comprised:

1. Structure of the tooth
2. Consequences of tooth decay
3. Periodontal diseases
4. Dietary habit
5. Oral hygiene habit
6. Importance of early diagnosis of dental disease
7. Importance of regular dental visits

d. *Seminar*

The parents were divided into small groups. One dental student was responsible for one group consisting of about eight parents.

In the seminar, toothbrushing technique (roll technique) was demonstrated on models followed by time for open questions and discussion.

e. *Pamphlets, toothbrush and dentrifice delivered*

Three pamphlets were handed out. One of them was made by our group (Appendix 3) and the others bought from the Government.

The content of the pamphlets covered:

1. Causes of caries
2. Importance of deciduous teeth
3. Keys to keep teeth healthy
4. Good oral hygiene and dietary habits
5. Importance of regular checkup
6. Injuries to deciduous teeth
7. Toothbrushing technique

Stage 4

a. *Post-examination of both groups*

Thirty nine pupils were involved. Once again VPI was registered.

b. *Questionnaire*

Parents of both groups were asked to answer the same questionnaire as used in the pre-examination.

Stage 5

a. *Statistical analysis*. Student's t-test and Chi-square test were used. The significance level was fixed to 0.05.

b. *Discussion of results*

c. *Preparing oral presentation and report*

RESULTS

A. Calibration

The calibration done before the project showed a Consistency Index (CI) of 0.87. The following controls of calibration during pre- and post-examination showed CI of 0.89 and 0.90, respectively.

B. Pilot Study

The pilot study disclosed plaque in all 20 children with a mean VPI of 41.7%.

C. General Background, Knowledge on Dental Health and Oral Hygiene Behaviour of Parents

The yearly income of test and control group is shown in Fig. 4. One third had an income below HK$8,000 a year and around one third had an income between HK$8,000 and 12,000 a year. Twelve percent had a higher income. Concerning education it was shown that around one third of the parents have had only primary school and a little smaller proportion secondary school education. About one third had high school education and one twentieth had no education at all (Fig. 5).

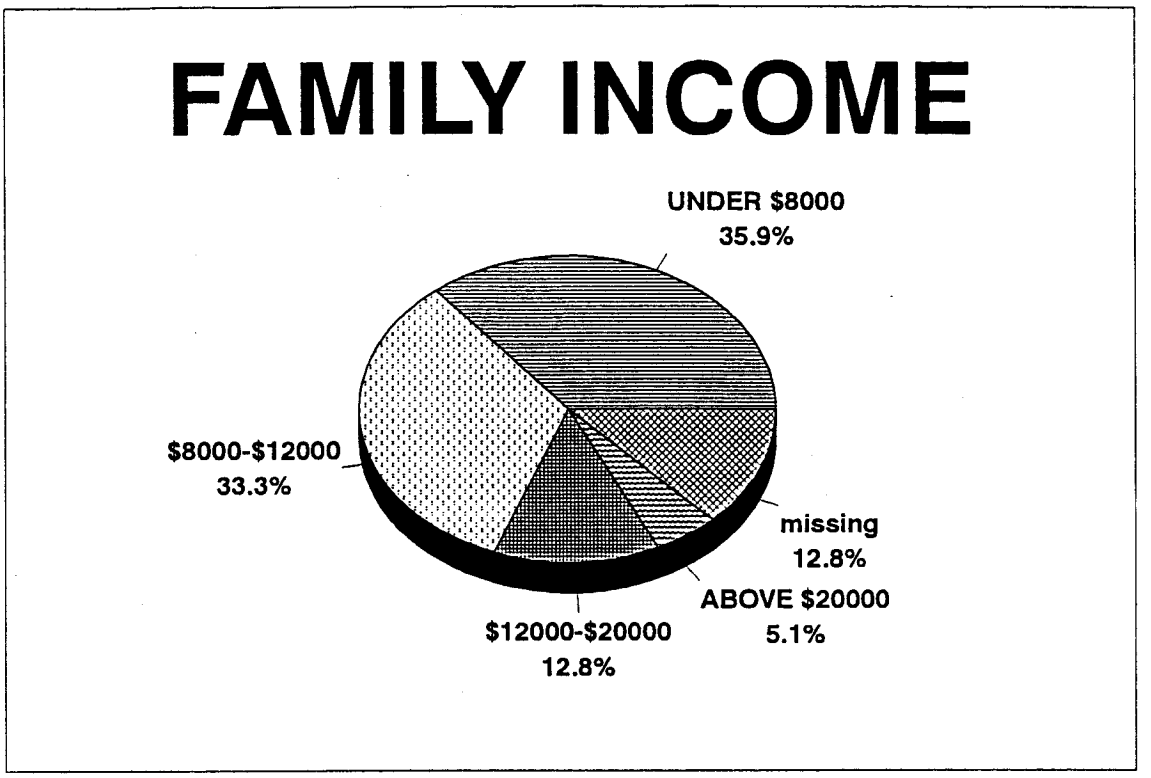

Fig. 4: Yearly income of parents involved in the project.

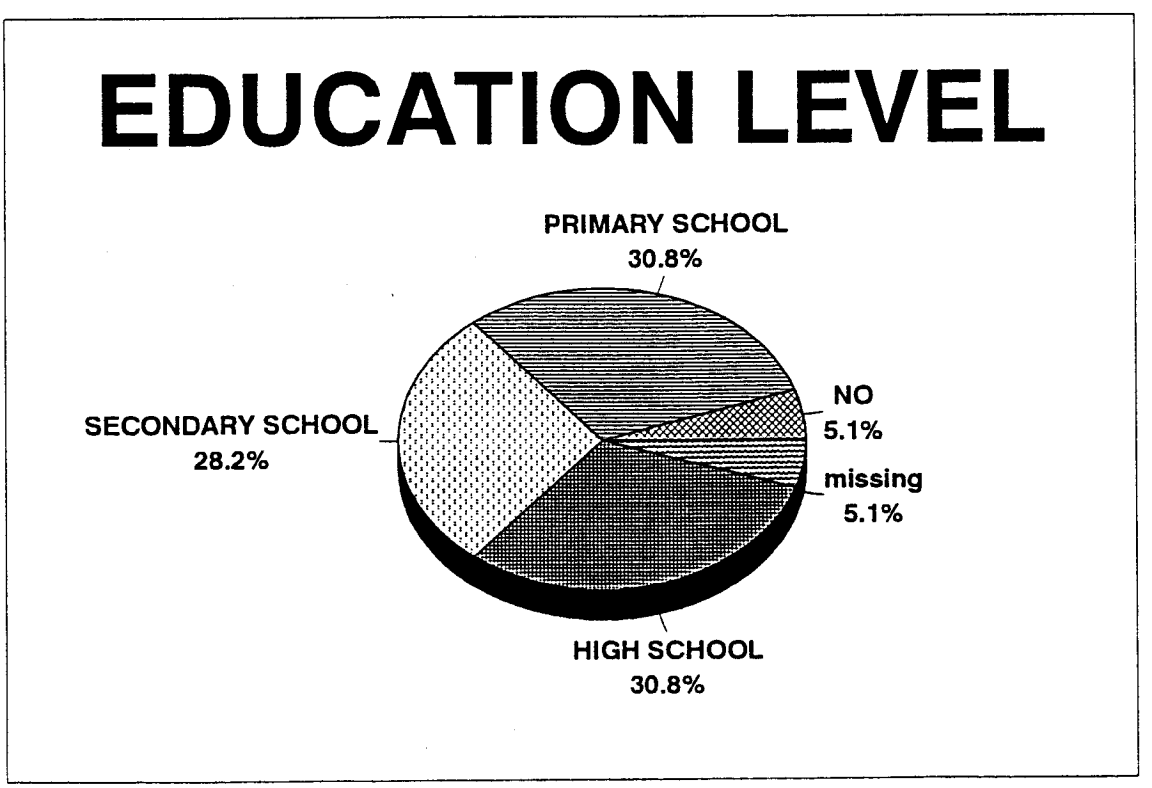

Fig. 5: Educational level of parents involved in the project.

The result of the questionnaires is shown in Figs. 6 and 7. The alternatives in questions about knowledge was pooled into "right" and "wrong" and the questions about behaviour into "positive" and "negative". There is no statistically significant difference in knowledge between the test group before and after the oral health information ($p > 0.05$, Chi-square test). The control group did not show a statistical significant different in right answers compared to the test group ($p > 0.05$, Chi-square test).

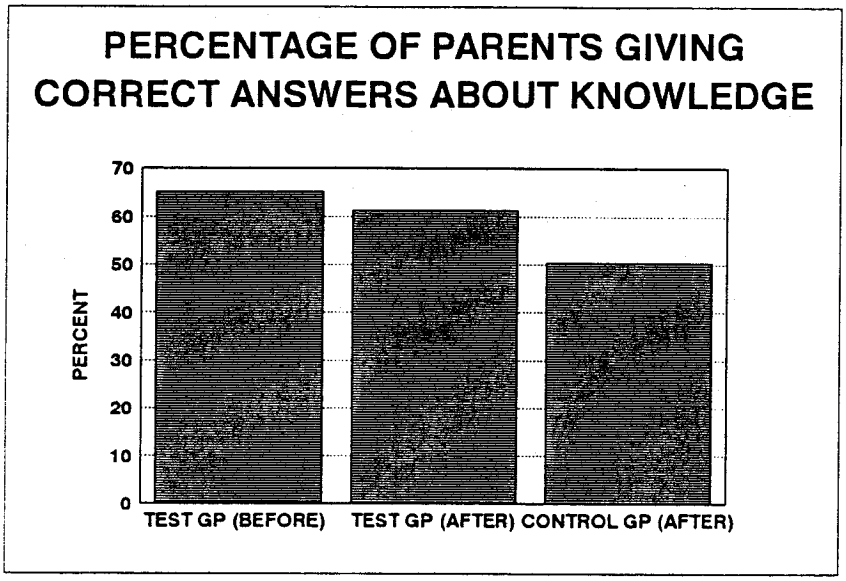

Fig. 6: Percent of parents giving correct answers to questions concerning knowledge on dental health.

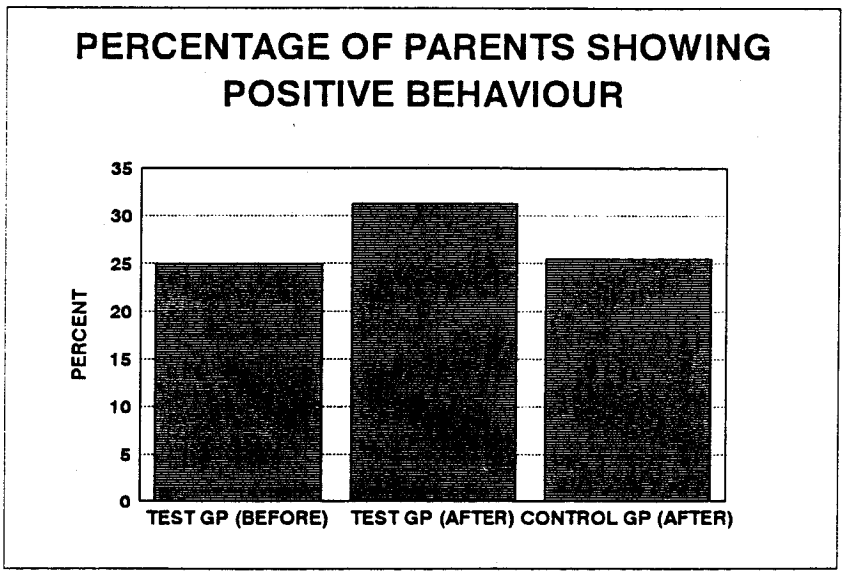

Fig. 7: Percent of parents showing positive behaviour toward oral hygiene. An increase in positive behaviour is seen in the test group after oral health instruction.

Concerning behaviour (Fig. 7) there is no statistical significant difference between the test- and control groups ($p > 0.05$, Chi-square test), but a statistical significant difference between the test group before and after instruction and motivation ($p < 0.05$, Chi-square test).

Some of the answers on the questionnaire are presented in the following. For more than half of the parents asked, helping in toothbrushing was a daily routine (Fig. 8). About one third only did it occasionally and eight percent never brushed their child's teeth.

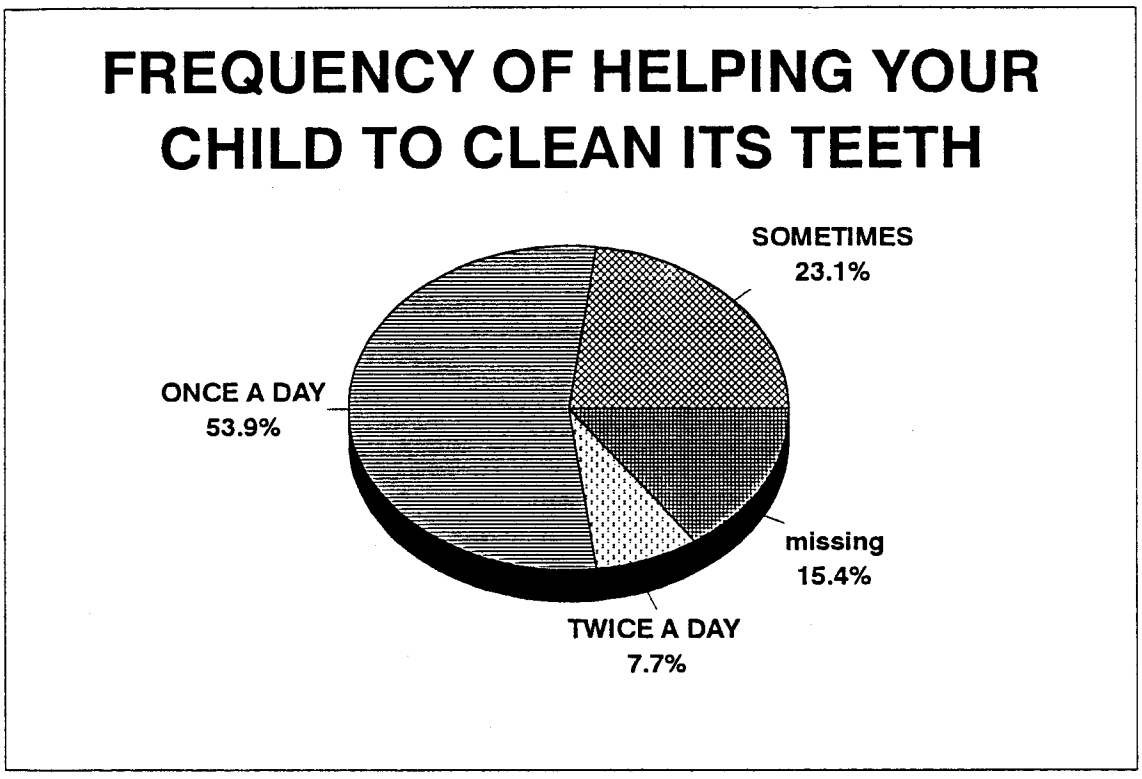

Fig. 8: Around 60% of the parents helped their child to clean the teeth at least once a day.

More than 50% of the parents would only bring their child to the dentist if it had toothache and none of the parents would bring the child to the dentist for a regular examination (Fig. 9).

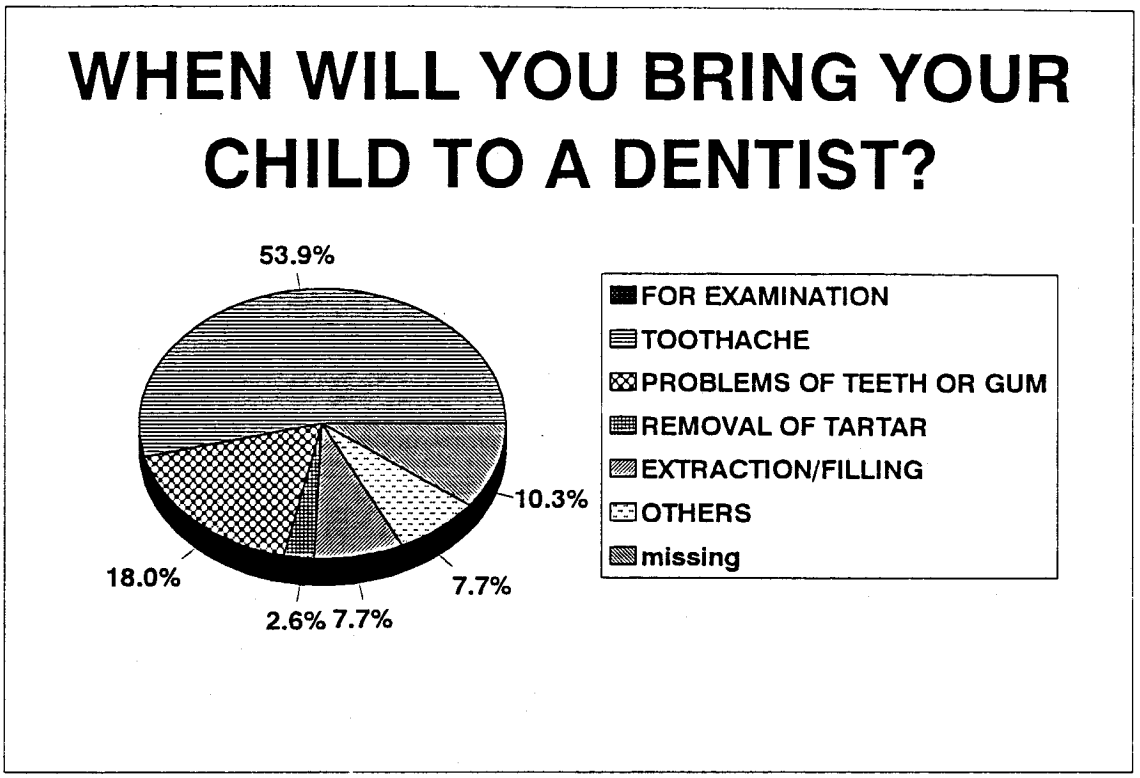

Fig. 9: Reasons for bringing the child to a dentist.

Most of the parents (80%) know that chocolate eating may be harmful to the teeth, but only a few thought that peanuts and potato chips are cariogenic (20 and 10%, respectively). Toffees were ranged as less cariogenic than chocolate (Fig. 10).

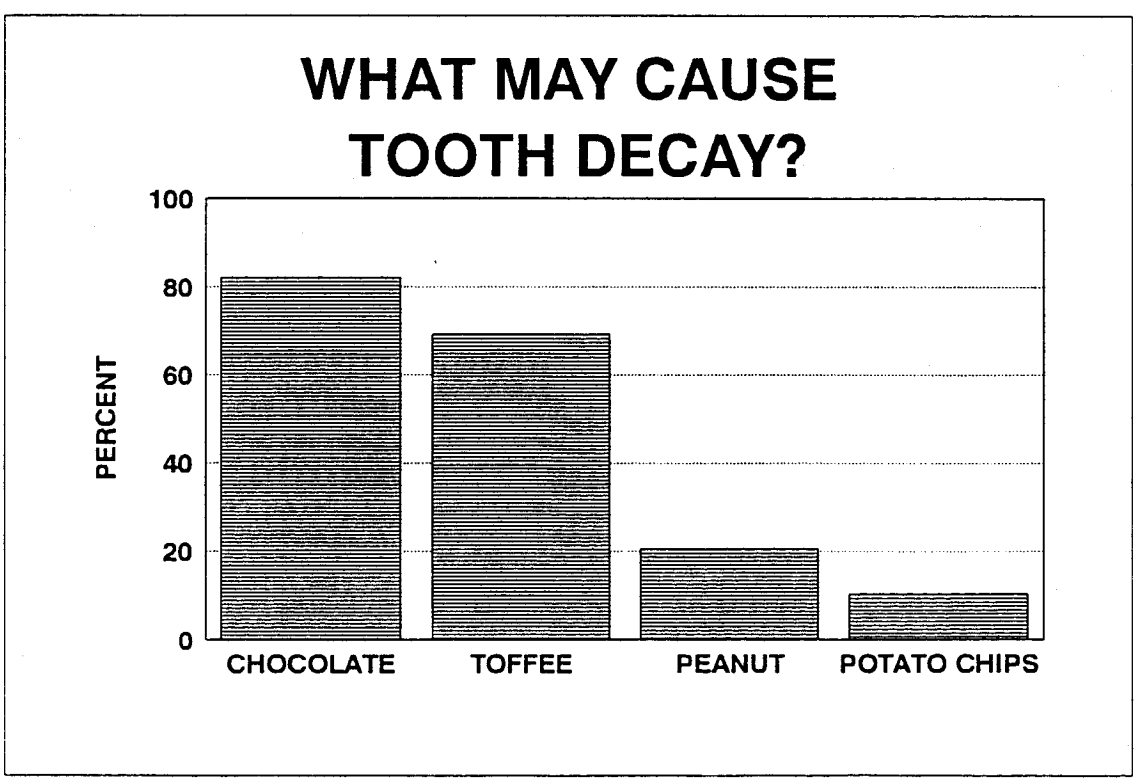

Fig. 10: Percent of parents agreeing in that different snacks could be harmful to the teeth.

About half of the parents know that it might be harmful to the teeth to sleep with a nursery bottle overnight if it contains milk or fruit juice. Nearly 40% stated that it was not harmful or that they do not know (Fig. 11).

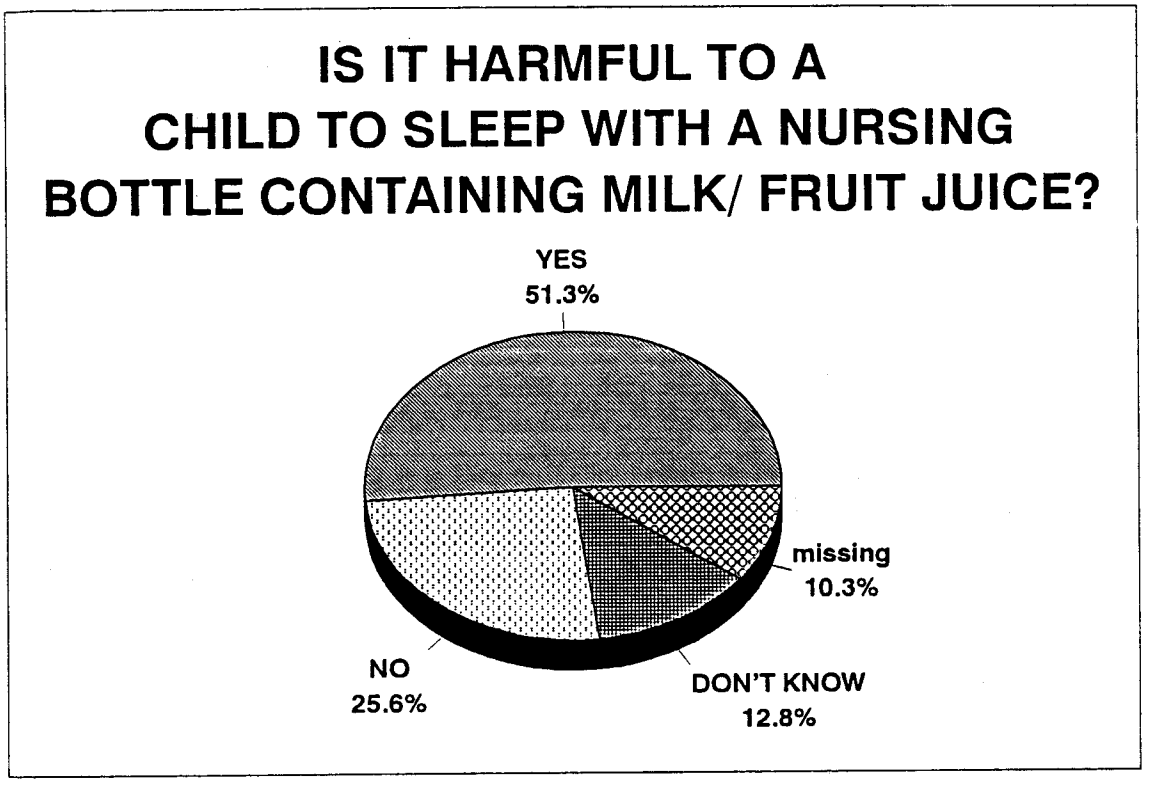

Fig. 11: Parents view on the risk of tooth decay when sleeping with a nursery bottle containing milk or fruit juice.

D. Oral Status of the Children before and after Intervention

The plaque examination of the test group before and after information and instruction showed a decrease in VPI of 30% ($p < 0.05$, Student's t-test). In the control group there was no decrease in VPI and there was no difference between the VPI in the test group before information and instruction and the control group (Fig. 12).

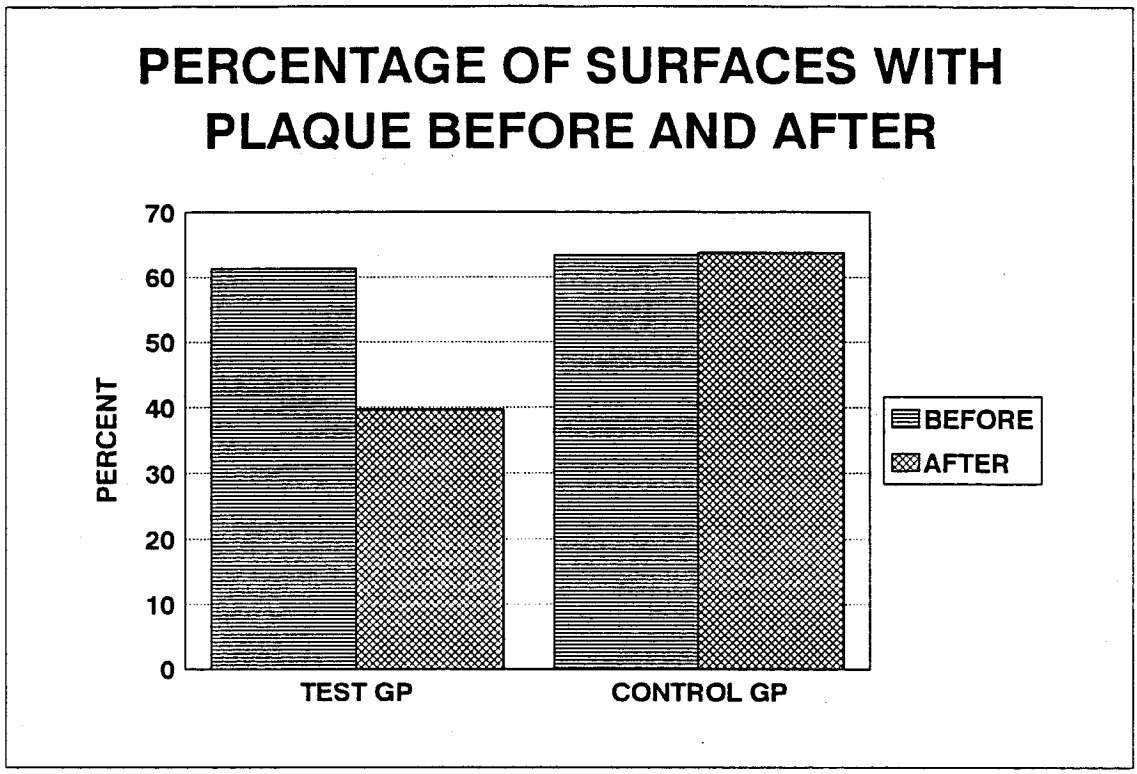

Fig. 12: Visible plaque index in test group before and after oral hygiene instruction and in the control group.

DISCUSSION

The age, social and educational distribution of the parents involved are in accordance with the general distribution in the Hong Kong population[9].

The rather high VPI in the children (60% of surfaces showing visible plaque (Fig. 12)) indicates that it is of importance to take some initiative to increase the oral hygiene standard of this age group. Until now most oral hygiene programmes are directed towards school children and only a few programmes are made for parents to children aged two to four[7, 10].

It is interesting to notice that the programme used in this project resulted in an improvement in oral hygiene of the children, created by their parents, but not in an increase in knowledge about dental health among those (the parents) who were responsible for this

improvement. This means that the simple , linear "knowledge, attitude, behaviour" model cannot be used to explain the change in behaviour (better oral hygiene) in this project.

It is obvious that knowledge on oral hygiene is not responsible for the behavioural change. So the only explanation for the behavioural change must be a change in attitudes. But we have not especially tried to change attitudes of the parents. We have just tried to inform them. If a change in attitudes has occurred - which seems to be the only explanation of the change in behaviour - this must have happened in an indirect way.

Here the socalled "Hawthorne" effect should be mentioned. This is described as the effect uncontrolled variables have on the dependent variable in a social experiment. The name "Hawthorne" originates from a department of Western Electric Company, USA, where *Elton Mayo*[11] in 1927 made a series of experiments concerning the influence of different factors on the productivity. As an example could be mentioned a lighting experiment. The lighting was primarily increased and the result was an increase in productivity. A control experiment where the lighting was decreased showed the same increase in productivity. Thus, it was shown that the improved social relations created by the feeling that someone "took care" or was interested was an important factor in changing behaviour - maybe more important than the change itself (changing the lighting).

That is exactly what we did: we showed interest in the parents care of their children. As the parents' fixation to their children is very strong, this merely interest starts a process where the parents want to change their oral hygiene behaviour toward their children. The content of our message is not of that importance. It is the felt *reason* for the message (interest in better health for the child) that is of importance (Fig. 13, step 1). Thus, the parents change behaviour. They brush the child's teeth and praise the child, when it accepts this toothbrushing (Fig. 13, step 2). Toothbrushing becomes a nice and lovely procedure for the child and gives it positive feelings towards this procedure (Fig. 13, step 3). The child shows this by behaving in a nice and lovely way (Fig. 13, step 4). A behaviour that the parents appreciate because they love their child and therefore are positive towards pleasant behaviour cues from the child (Fig. 13, step 5). This in turn strengthen the parents attitudes toward oral hygiene of their child and their behaviour. In this way you have created a self-increasing circle that will continue even if the "catalyst" (the dentist) is not present.

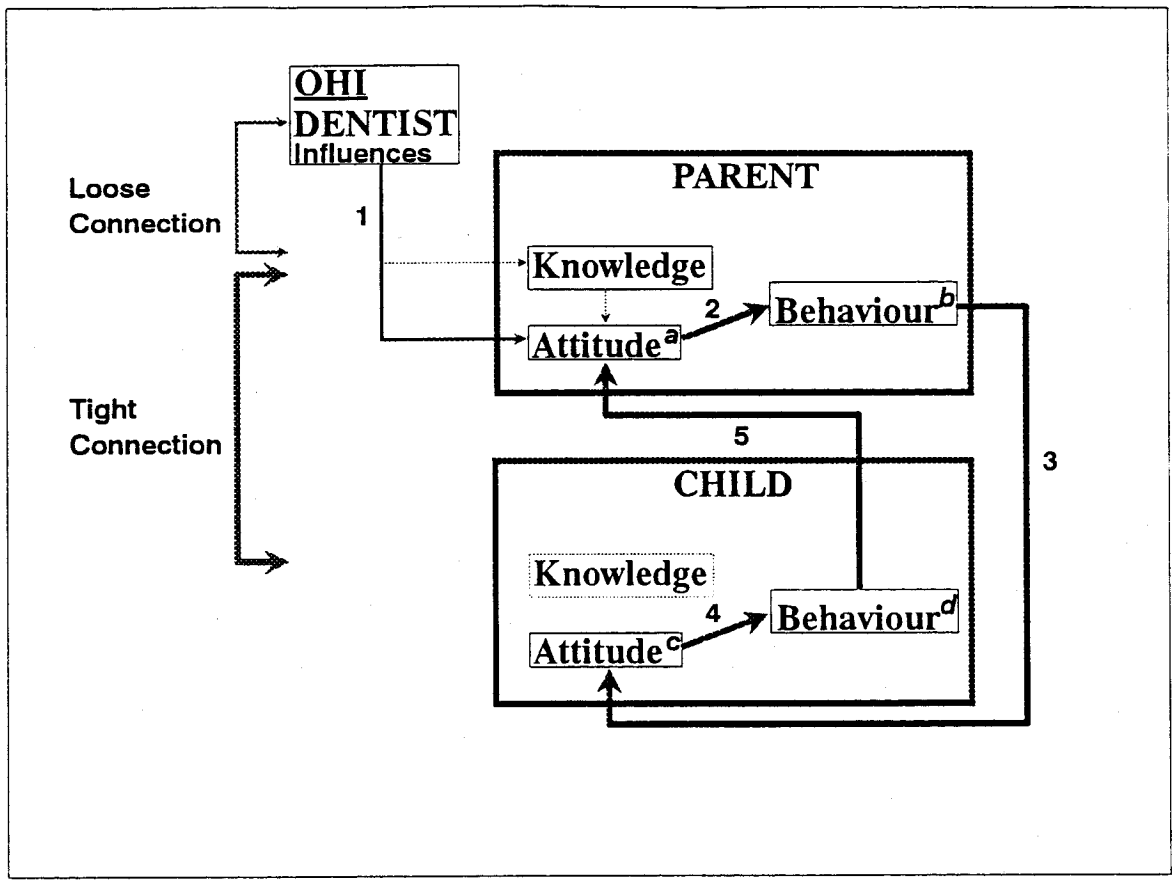

Fig. 13: A diagrammatic presentation of the Hawthorne effect and its influence on the self-increasing circle existing between parent's and child's attitude and behaviour (see text for further explanation).

We do not know from our project for how long time this self-increasing circle will work. Maybe a new input (Fig. 13, step 1) is necessary after some time. But if the theory is right it has some implications: It is more important to attach weight to showing interest in the target group's welfare than to try to convince the key persons (parents) that oral hygiene is important for certain reasons. It is the child's general welfare, and not the teeth that concerns the parents.

If the abovementioned theory is right, it is understandable that the parents knowledge on and behaviour towards dental care was insufficient, even after our instruction and information (Figs. 6 and 7). This could be decisive for the continuous function of the above-mentioned self-increasing circle. We have only proofed that the parents' toothbrushing habits improved. But there are still some areas where improvement is desirable. That goes for knowledge about healthy and unhealthy food and the application of such food (Figs. 10 and

11). The attitudes towards dental visits is deleterious, too (Fig. 9). To change these areas may take a long time, maybe a generation. But just convincing the parents that dental health is a part of the general welfare of the child is nevertheless a beginning and may manure the ground for changes in knowledge and attitudes.

CONCLUSION

1. Knowledge about oral health of the parents towards their children aged two to four years is not sufficient, and the oral health of these children is insufficient.

2. The oral health of the children aged two to four years was improved after the education and oral hygiene instruction of their parents.

3. Positive change of the attitude of the parents can in turn change their behaviour to improve the oral hygiene of their children.

4. Although increase in knowledge on oral health among the parents does not seem to be of that importance, continuous oral health education is necessary and recommended.

ACKNOWLEDGEMENTS

We would especially forward our sincere gratitude to *Miss Cheung Yuk King*, supervisior of the Yan Chai Hospital Jn Ching Chu Child Care Centre for her assistance and cooperation. This thank should be extended to the whole staff.

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Dr. D. O'Donnell, Department of Children's Dentistry and Orthodontics, Faculty of Dentistry was a great help in the calibration phase of this study.

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Finally, we want to bring our thanks to the Dental Illustration Unit, Faculty of Dentistry for their helpfulness even when time was short.

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APPENDICES

Appendix 1.

Appendix 2.

Appendix 3.

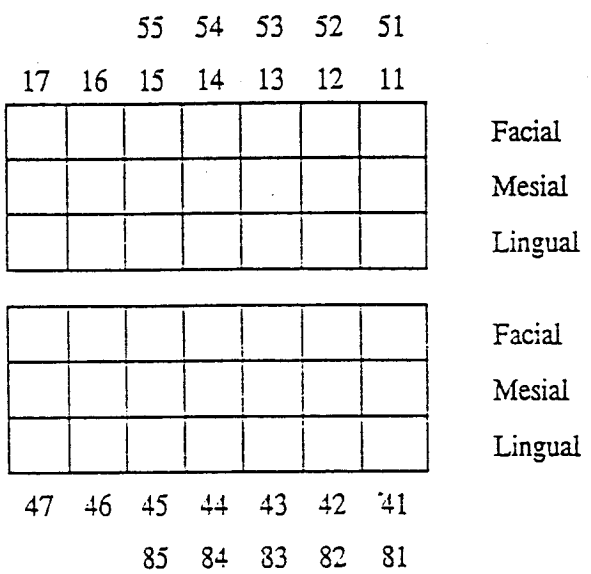
DEPARTMENT OF PERIODONTOLOGY AND PUBLIC HEALTH
THE UNIVERSITY OF HONG KONG

BDS 4.4/1993

Date _____ Examiner _____

Class _____ No _____ D.O.B. _____ Age _____

Visible Plaque Index



DEPARTMENT OF PERIODONTOLOGY AND PUBLIC HEALTH
THE UNIVERSITY OF HONG KONG

Group 4.4/1993

Name: _____ Class: _____ Age: _____

Relationship: _____

1. Do you have the habit of helping your child to clean the mouth?

☐ Yes
☐ Sometimes
☐ No (skip Q2 and Q3)

2. When did you start to help your child to clean the mouth?

☐ Age 0
☐ When he/she has teeth
☐ When he goes to school

3. How frequent do you help your child to clean the mouth?

☐ Sometimes
☐ Once a day
☐ Twice a day
☐ More than 3 times a day

4. Which of the following will you choose as a reward if your child has done a good job? (more than 1 answer)

☐ Chocolate
☐ Toffee
☐ Peanut
☐ Potato chips

5. Under what circumstances will you consider to bring your child to a dentist?

☐ For examination
☐ Toothache
☐ Problems of teeth or gum
☐ Scaling (removal of tartar)
☐ Extraction/Filling
☐ Others, please specify _____

6. Do you think there is any disadvantages of an infant sleeping with a nursery bottle containing milk/fruit juice?

- ☐ Yes
- ☐ No
- ☐ Don't know

7. What is your own brushing habit?

- ☐ Less than once a day
- ☐ Once a day
- ☐ Twice a day
- ☐ $\geq$ 3 times a day

8. Under what circumstances will you visit a dentist?

- ☐ Examination
- ☐ Toothache
- ☐ Teeth or gum problems
- ☐ Scaling
- ☐ Extraction/Filling
- ☐ Others, please specify _____

9. How many milk teeth should a child have?

- ☐ 10
- ☐ 16
- ☐ 20
- ☐ 32

10. Do you think fluoride can help strengthening the teeth?

- ☐ Yes
- ☐ No
- ☐ Don't know

11. Which of the followings do you think will cause tooth decay?
(more than 1 answer)

- ☐ Chocolate
- ☐ Toffee
- ☐ Peanut
- ☐ Potato chips

12. Which of the following beverages do you think will cause tooth decay? (more than 1 answer)

- ☐ Coca Cola (Coke)
- ☐ Tea
- ☐ Milk powder
- ☐ Orange juice

13. How is the oral health of your child?

- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Poor

14. Who will be responsible for taking care of young child after school or during holidays?

- ☐ Mother
- ☐ Father
- ☐ Grandfather/Grandmother
- ☐ Relatives
- ☐ Guardian
- ☐ Others, please specify _____

15. This child is your child number:

- ☐ One
- ☐ Two
- ☐ Three
- ☐ Four
- ☐ Five

16. What education level have you obtained?

- ☐ No education
- ☐ Primary school
- ☐ Secondary school
- ☐ High school
- ☐ Tertiary education

17. What is the yearly income of your family?

- ☐ Less than $8,000
- ☐ $ 8,000 - $12,000
- ☐ $12,000 - $20,000
- ☐ Above $20,000

香港大學牙醫學院四年級第四組
香港大學牙醫學院牙周病學及公共衛生學系
媽媽寶寶齊護齒

幼兒姓名：_____ 班級：_____ 年齡：_____

與幼兒關係：_____

1. 有沒有替孩子清潔口腔？

☐ 1. 有
☐ 2. 有時有
☐ 3. 從沒有（請無需答第二及第三題）

2. 你從何時開始替孩子清潔口腔？

☐ 1. 0 歲
☐ 2. 有牙時
☐ 3. 入學時

3. 你替孩子清潔口腔的次數習慣是：

☐ 1. 間中一次
☐ 2. 每日一次
☐ 3. 每日兩次
☐ 4. 每日三次或以上

4. 當你的孩子做得好的時候，你會用下列那些食物來獎勵他？
(可選擇多過一個答案)

☐ 1. 朱古力
☐ 2. 拖肥糖
☐ 3. 花生
☐ 4. 薯片

5. 通常在甚麼情況下你會帶你的孩子去看牙醫？

☐ 1. 作口腔檢查
☐ 2. 牙痛時
☐ 3. 牙齒或牙肉有問題時
☐ 4. 覺得需要洗牙時
☐ 5. 覺得需要脫牙或補牙時
☐ 6. 其他情況，請詳述 _____

6. 幼兒含著盛著奶／果汁的奶樽睡覺有沒有問題？

☐ 1. 有
☐ 2. 無
☐ 3. 不知道

7. 你（家長）的擦牙習慣如何？

☐ 1. 少於每日一次
☐ 2. 每日一次
☐ 3. 每日兩次
☐ 4. 每日三次或以上

8. 通常在甚麼情況下你會去看牙醫？

☐ 1. 作口腔檢查
☐ 2. 牙痛時
☐ 3. 牙齒或牙肉有問題時
☐ 4. 覺得需要洗牙時
☐ 5. 覺得需要脱牙或補牙時
☐ 6. 其他情況，請詳述 _____

9. 正常小孩子有多少隻乳齒？

☐ 1. 10 隻
☐ 2. 16 隻
☐ 3. 20 隻
☐ 4. 32 隻

10. 你認爲氟素對牙齒成長有幫助嗎？

☐ 1. 有
☐ 2. 無
☐ 3. 不知道

11. 你認爲孩子吃那些零食較容易引起蛀牙？（可選擇多過一個答案）

☐ 1. 朱古力
☐ 2. 拖肥糖
☐ 3. 花生
☐ 4. 薯片

12. 你認爲那些飲品容易引起蛀牙？（可選擇多過一個答案）

☐ 1. 可樂
☐ 2. 茶
☐ 3. 奶粉
☐ 4. 橙汁

13. 你認爲你的孩子現時的口腔健康情況如何？

☐ 1. 很好
☐ 2. 好
☐ 3. 普通
☐ 4. 差

14. 幼兒園每天下課後，或假期，誰是照顧　貴子女時間最多的人？

☐ 1. 母親
☐ 2. 父親
☐ 3. 祖父／母或外祖父母
☐ 4. 親戚
☐ 5. 保母
☐ 6. 其他，請註明 _____

15. 這名孩子是你第幾名子女？

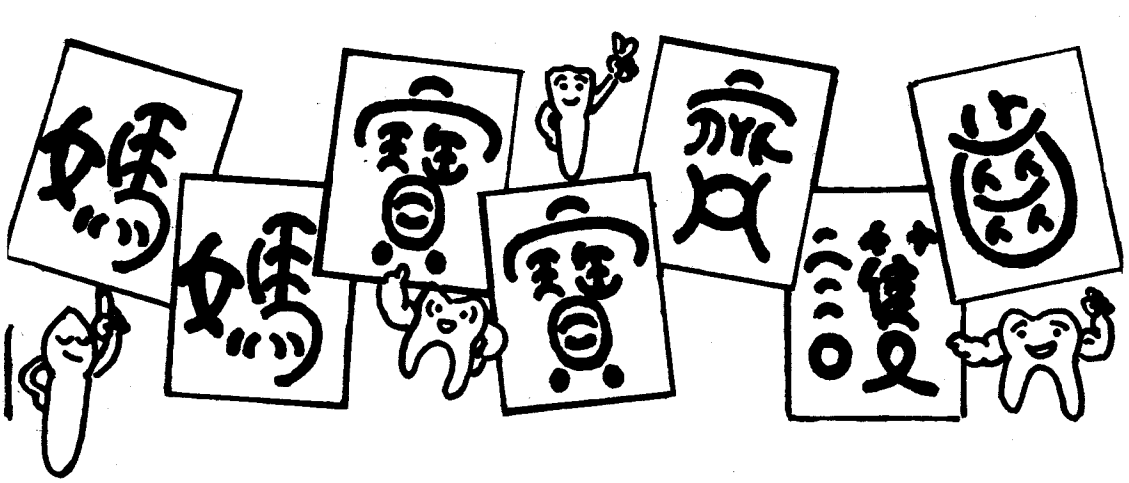
☐ 1. 第一個
☐ 2. 第二個
☐ 3. 第三個
☐ 4. 第四個
☐ 5. 第五個

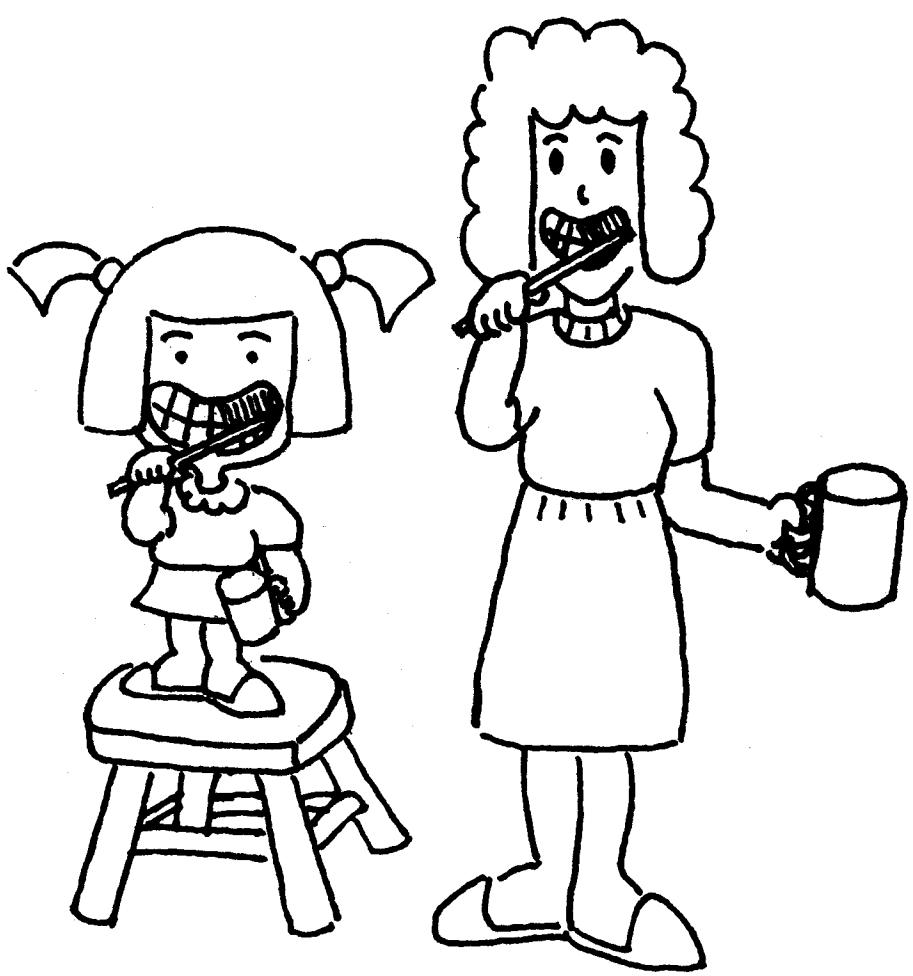
16. 你的教育程度是：

☐ 1. 未受過教育
☐ 2. 小學
☐ 3. 初中
☐ 4. 高中或中專
☐ 5. 大專或以上

17. 你的家庭每月收入約是：

☐ 1. $8,000 以下
☐ 2. $8,000 - $12,000
☐ 3. $12,000 - $20,000
☐ 4. $20,000 以上





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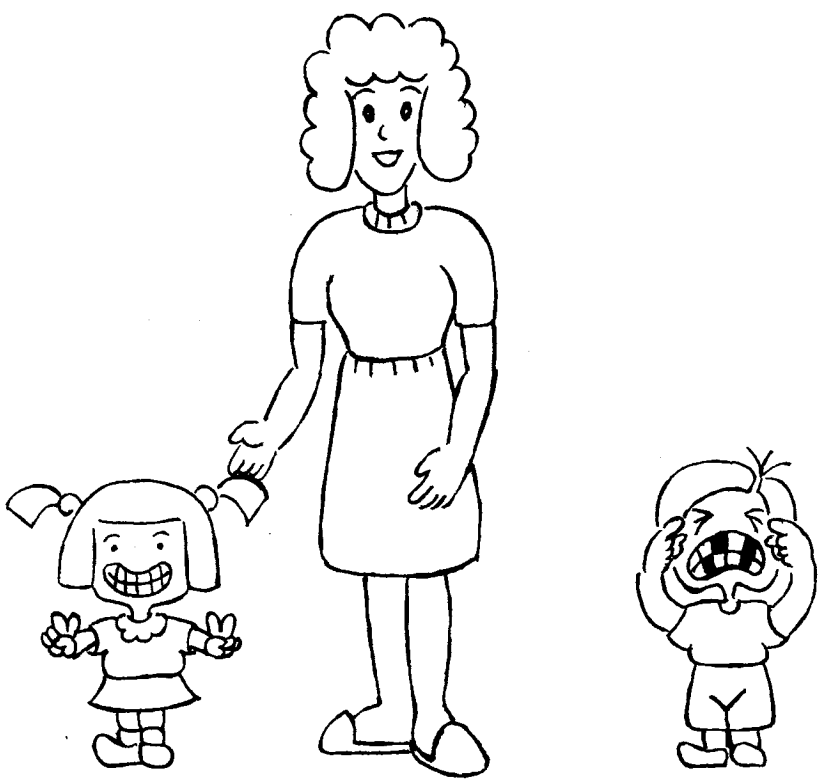
2. 蛀牙的成因
3. 乳齒的重要
4. 健康牙齒秘訣
5. 養成良好的飲食習慣
6. 如何建立清潔口腔的習慣
7. 定期檢查
8. 乳齒受創
9. 結語

前言

「童年的你，必定天真可愛 ....」

對於天真可愛的孩子而言，要有健康快樂的童年，便有賴家長的照顧與培育。

牙齒的健康對成長中的兒童的身心發展有莫大的影響；家長有責任幫助孩子擁有一副健康及美麗的牙齒，並使他們對口腔衞生養成正確的態度和習慣。

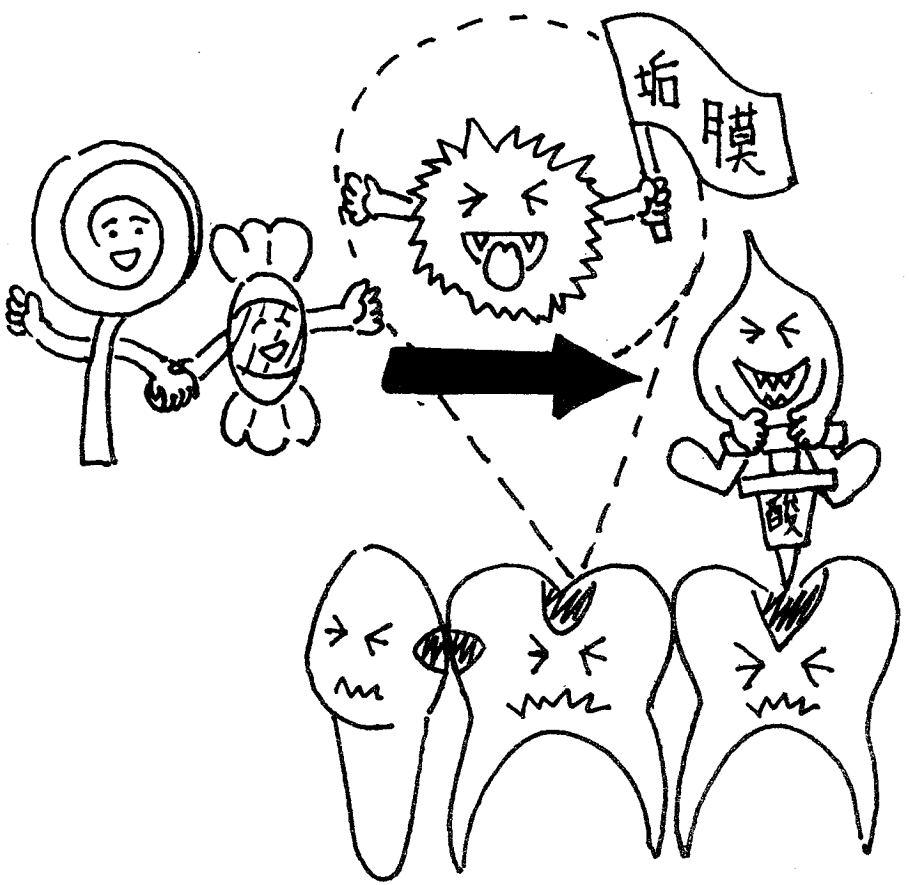


蛀牙的成因

兒童最常見的牙患莫過於蛀牙，而引致蛀牙的罪魁禍首便是牙垢膜。

我們進食之後，口腔內的細菌便利用食物中的養料產生一層糜狀的物質黏附在牙齒表面，稱爲牙垢膜。

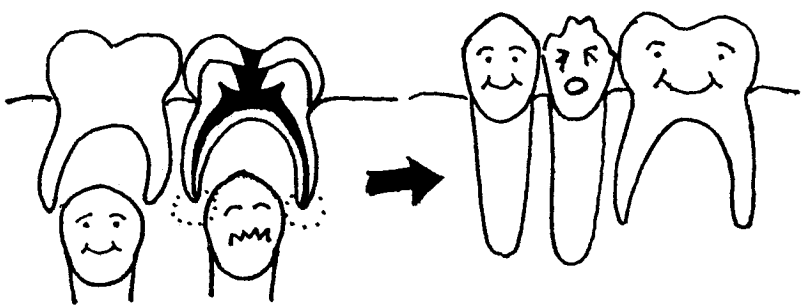
牙垢膜中的細菌吸收食物中的糖份，產生酸素；酸素侵蝕牙齒，便形成蛀牙。



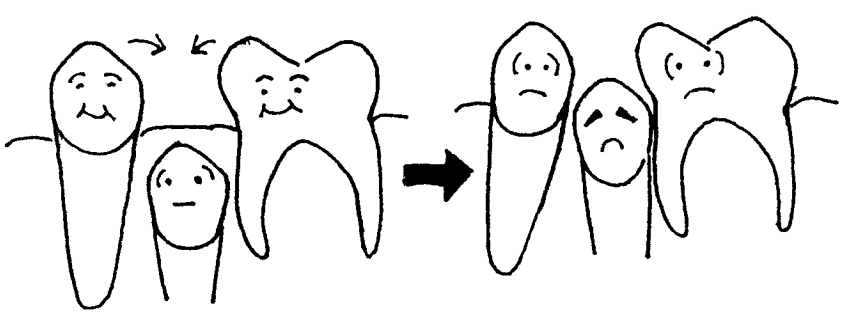
乳齒的重要

有些家長會認爲乳齒並不重要，因爲它們最終會被恆齒所代替。但事實上，乳齒的健康對恆齒的發展影響重大，絶不能忽視：

(1) 由於蛀牙能引致牙髓發炎而壞死，然後在牙床骨形成牙瘡；成長中的恆齒受到細菌感染以致發展不健全。



(2) 乳齒過早脫落會引致兩旁牙齒移位；空位收窄，恆齒便會在不正常的位置長出來。



此外，由蛀牙引起的疼痛會影響兒童的情緒、食慾及睡眠。

健康牙齒秘訣

(1) 甜食物，壞牙齒。
(2) 早晚刷牙。
(3) 定期檢查牙齒。

養成良好的飲食習慣

締造健康的牙齒，良好的飲食習慣不可少。

(1) 均衡飲食：

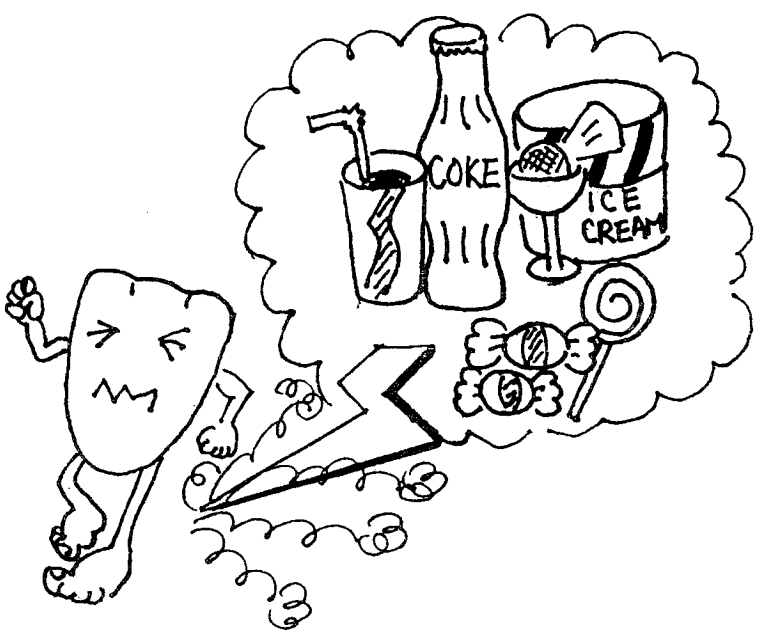
小孩子由出生到十二歲左右，恆齒便逐漸形成。均衡的飲食對牙齒的成長很重要，應包括五穀類、肉類、蛋類及豆品類；蔬果類；奶類及鈣質和水份。

(2) 健康的飲食習慣：

大部份小孩子都喜愛甜食，如糖果、汽水等，但由於口腔內的細菌會利用糖份作養料及產生酸素，形成蛀牙：所以進食的次數越多，蛀牙的機會就越大。

要養成良好的飲食習慣，以下幾點不可少：

- 在正餐之間 （如下午茶時間），不鼓勵孩子吃零食。若孩子想吃零食，宜給他們一些沒有或低糖份的食物，如鹹餅乾、雞蛋、芝士或水果等。
- 讓孩子在飯餐時才進食含糖食物。
- 避免以甜品糖果獎勵孩子，可用水果、玩具或稱讚代替。
- 勿讓孩子吮著奶瓶睡覺或用奶瓶盛著含糖飲料在兩餐之間餵哺。



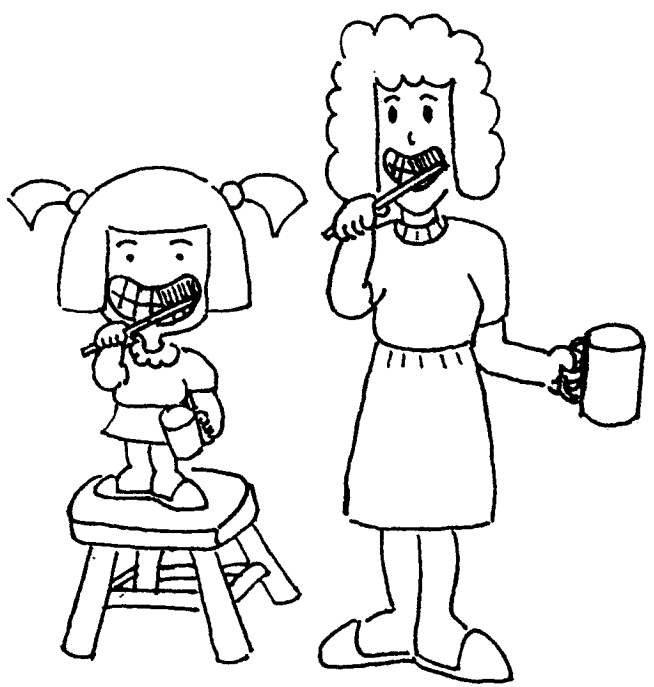
如何建立清潔口腔的習慣

刷牙是防止蛀牙的最佳方法，目的是要清除牙齒表面及周圍的牙垢膜。

選擇牙刷應選軟毛至中毛的牙刷；而牙膏則需含有氟素，幫助防止蛀牙。

雖然二至四歲的兒童未必能夠徹底清潔牙齒，但重要的是要建立刷牙的習慣。

所以家長應該讓孩子自己刷牙，加以從旁指導，從而建立他們清潔口腔的習慣；之後家長可幫助他們徹底清潔。每天最少要刷牙兩次，最宜在早餐後及睡覺前。

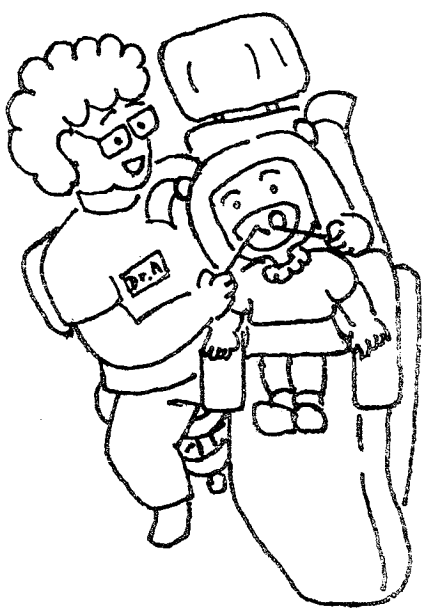


定期檢查

明智的家長會在孩子乳齒出齊後 （約兩歲半），帶孩子往見牙醫作第一次檢查，並且每隔半年至一年作定期檢查。

若孩子在未有任何牙患前便開始接受牙齒檢查，牙醫可能只需要給予一些簡單而舒服的治療，加上牙醫的稱讚，孩子便可以和牙醫建立良好的關係，從而使孩子對定期檢查牙齒感到興趣。

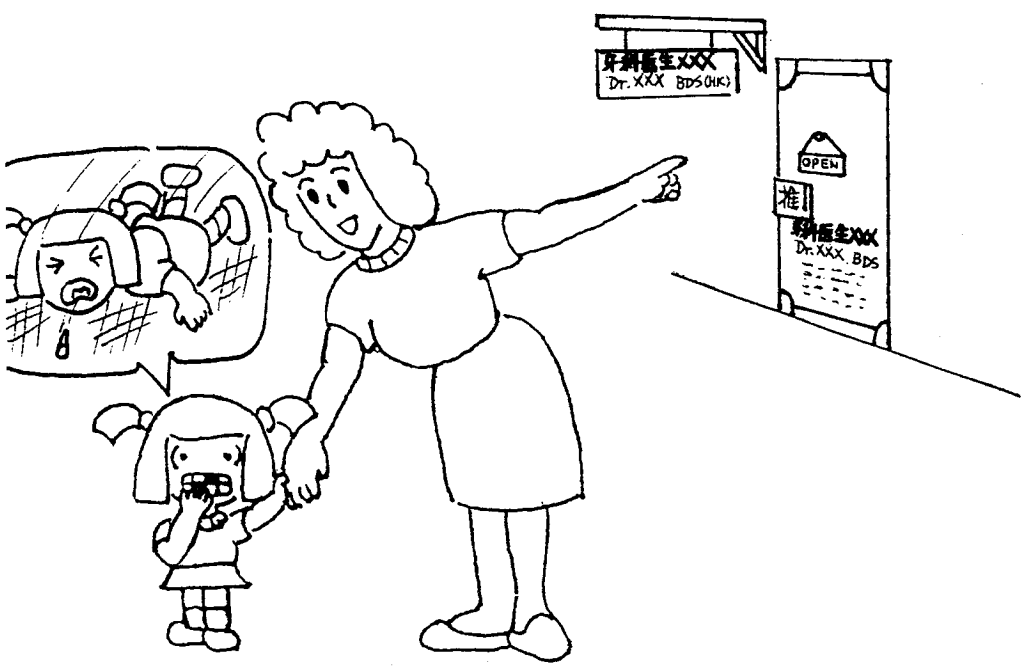
初期的蛀牙是不容易發覺的，如有定期檢查的習慣，牙醫可以及早發覺並給予適當的治療。



乳齒受創

這個年紀的孩子愛跑跳，在學校及遊樂場嬉戲時，常會跌倒及撞倒，引致口部（例如門牙）受創。

乳齒受傷對正在形成的恆齒可能會造成或大或小，甚至永久性的傷害，而這些影響未必能從乳齒表面察覺到。所以，家長必須盡快帶孩子往見牙醫作詳細檢查；此外，以後亦需要密切的觀察。因此，家長亦須依照牙醫指示依時覆診。



結語

家長當然希望子女會有一副健康而漂亮的牙齒，所以家長便應該作為領導者，更應以身作則，早晚清潔牙齒及定期往見牙醫。